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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,381	07/16/2003	Pao-Ching Tseng	MTKP0048USA	1380
27765	7590	11/16/2005	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			PATEL, KAUSHIKKUMAR M	
			ART UNIT	PAPER NUMBER
			2188	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/604,381	TSENG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kaushikkumar Patel	2188	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bjerge et al. (5,655,099) (Bjerge herein after).

As per claim 1, Bjerge teaches: a method for accessing a memory having a storage space larger than the addressing capability of a microprocessor (column 4, lines 23-25), the memory comprising plurality of memory bank (column 1, lines 58-59), the microprocessor comprising stack, an interrupt processing unit, and a memory bank selector for selecting the memory banks (column 4, lines 26-38), the method comprising (figure 5): (a) storing an interrupt service routine in one of the memory banks (taught as an access program stored in banked ROM, column 3, lines 20-25); (b) when an interrupt occurs, pushing a current program counter address onto the stack, and setting the memory bank selector to the memory bank storing the interrupt service routine (taught as present bank number is read and the previous program address is saved in the

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stack, column 4, lines 64-67 and continuing on column 5, lines 1-5); (c) switching the microprocessor to the memory bank storing the interrupt service routine to execute the interrupt service routine (taught as a subroutine is run from the new bank, column 5, lines 6-7); (d) after interrupt service routine finishes execution, popping the bank number of the memory bank stored in the stack in step (b) from the stack by the interrupt processing unit, restoring the popped bank number to the memory bank selector, and popping the program counter address stored in the stack in step (b) from the stack (taught as bank switching operation identifies the saved bank number in the stack and program counter returns to the program address previously saved, column 5, lines 7-9); and switching the microprocessor back to the memory bank corresponding to the bank selector to continue the executing the program interrupted in step (b) (column 5, lines 10-19).

As per claim 2, Bjerge teaches M68HC11 microprocessor (column 5, line 35) (M68HC11 is an eight bit microprocessor with similar instruction set, thus Bjerge not explicitly but implicitly teaches that microprocessor is MCS series microprocessor).

As per claim 3 and 4, Bjerge teaches about not storing access program to common memory space (column 2, lines 7-9), thus Bjerge inherently teaches storing common area as well as not storing the interrupt service routine (access program) in common area.

As per claim 5, Bjerge teaches M68HC11 microprocessor, which is a single chip microprocessor.

**Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaneko (5,146,581) teaches storing of interrupt service routine in common areas of all banks of memory.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaushikkumar Patel whose telephone number is 571-272-5536. The examiner can normally be reached on 8.00 am - 4.30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kaushikkumar Patel  
Examiner  
Art Unit 2188

  
kmp

Kevin L. Ellis  
Primary Examiner

